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STATEMENT BY APPLICANT**

(Not for submission under 37 CFR 1.99)

Application Number		11522320
Filing Date		2005-10-17
First Named Inventor	John Schenk	
Art Unit	1657	
Examiner Name	Tiffany Marueen Gough	
Attorney Docket Number	XY-Optimum-USNP	

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	1	6326071		2001-12-11	Austin	
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	4	6752298		2004-06-22	Garcia et al.	
	5	6761286		2004-07-13	Py et al.	
	6	6761288		2004-07-13	Garcia	
	7	6789706		2004-09-14	Abergel et al.	
	8	6789759		2004-09-14	Heldt	

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9	6793387		2004-09-21	Neas et al.	
10	4796788		1989-01-10	Bond	
11	5492534		1996-02-20	Attheyde	
12	5665315		1997-09-09	Robert et al.	
13	5690615		1997-11-25	Krasnoff et al.	
14	5799830		1988-09-01	Carroll et al.	
15	5893843		1999-04-13	Rodrigues Claro	
16	5919360		1999-07-06	Contaxis, III et al.	
17	6495366		2002-12-17	Briggs	
18	6086574		2000-07-11	Carroll et al.	
19	4573796		1986-03-04	Martin	

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20	7105355		2006-09-12	Kurabayashi et al.	
21	5017497		1991-05-21	De Grooth	
22	7195920	B2	2007-03-27	Seidel et al.	
23	5934885		1999-08-10	Ferrell et al.	
24	5559032		1996-09-24	Pomeroy et al.	
25	3756459		1973-09-04	Bannister	
26	7208265	B1	2007-04-21	Schenk	
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1	20060147894	A1	2006-07-06	Sowter	
2	20040107150	A1	2000-06-03	Neas et al.	
3	20030002027	A1	2003-01-02	Fritz	
4	20070099171	A1	2007-05-03	Schenk	
5	20070099260	A1	2007-05-03	Seidel et al.	
6	20070042342	A1	2007-02-22	Seidel et al.	
7	20070092980	A1	2007-04-29	Schenk	
8	20060263829	A1	2006-11-15	Evans et al.	
9	20050011582	A1	2005-01-20	Haug	
10	20060118167	A1	2006-06-08	Neas et al.	
11	20050064383	A1	2005-03-24	Bashkin et al.	

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12	20060281176	A1	2006-12-14	Seidel et al.	
13	20070026378	A1	2007-02-21	Schenk	
14	20070026379	A1	2007-02-01	Seidel et al.	
15	20020131957	A1	2002-09-19	Gavin	

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	2	100998524	CN		2007-07-18	Beijing Glorious Land Agriculture Co.		<input type="checkbox"/>
	3	2002041906	WO	A2	2001-11-21	Pharmacia Corp. (c/o Monsanto Company)		<input type="checkbox"/>
	4	2003020877	WO	A2	2002-08-15	Pharmacia Corp. (c/o Monsanto Company)		<input type="checkbox"/>
	5	2007016090	WO	A2	2002-02-08	XY, Inc.		<input type="checkbox"/>

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6	0140616	EP		1985-05-08	Technicon Instruments Corp.		<input type="checkbox"/>
7	199105236	WO		1991-04-18	Aerometrics, Inc.		<input type="checkbox"/>
8	2006060770	WO	A2	2006-08-06	XY, Inc.		<input type="checkbox"/>
9	03109426.0	ZL		2005-12-21	Inner Mongolia Mengniu Reproductive Biotechnology		<input type="checkbox"/>

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	1	Pursley, J.R. et al., Reproductive Management of Lactating Dairy Cows Using Synchronization of Ovulation; 1997 J. Dairy Sci 80:301-306	<input type="checkbox"/>
	2	Bagnato, A., Genetic and Breeding; Phenotypic Evaluation of Fertility Traits and Their Association with Milk Production of Italian Friesian Cattle; 1994 J. Dairy Sci 77:874-882	<input type="checkbox"/>
	3	Panskowski, J., A., et al. Use of Prostaglandin F2a as a Postpartum Reproductive Management Tool for Lactating Dairy Cows; 1995 J. Dairy Sci 78:1477-1488	<input type="checkbox"/>
	4	Scipioni, R. L., et al., Short Communication: An Electronic Probe Versus Milk Progesterone as Aids for Reproductive Management of Small Dairy Herds; 1999 J. Dairy Sci 82:1742-1745	<input type="checkbox"/>
	5	Fricke, P. M., Scanning the Figure - Ultrasonography as a Reproductive Management Tool for Dairy Cattle; J. Dairy Sci 85:1918-1926	<input type="checkbox"/>

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6	Grant, V. J., et al., Sex-Sorted Sperm and Fertility: An Alternative View; Biology of Reproduction 76, 184-188 (2007)	<input type="checkbox"/>
7	Garner, D. L., Sex-Sorting Mammalian Sperm: Concept to Application in Animals; Journal of Andrology, Vol. 22, No. 4 July/Aug. 2001	<input type="checkbox"/>
8	Tubman, L.M. et al., Characteristics of calves produced with sperm sexed by flow cytometry/cell sorting; 2004 Amer. Society of Animal Sciences; 82:1029-1036	<input type="checkbox"/>
9	Weigel, K. A., Exploring the Role of Sexed Semen in Dairy Production Systems; J. Dairy Sci. 87: (E.Supp.): E120-E130; 2004 American Dairy Science Assoc.	<input type="checkbox"/>
10	Ferre, L., et al., In vitro-derived embryo production with sexed and unsexed semen from different bulls; Reproduction Fertility and Development, Vol 16, Part 1/2, Page 253, 2004	<input type="checkbox"/>
11	Dalton, J.C., et al., Effect of Time of Insemination on Number of Accessory Sperm, Fertilization Rate, and Embryo Quality in Nonlactating Dairy Cattle. J Dairy Sci. 84:2413 - 2418	<input type="checkbox"/>
12	Dransfield, M.B.G., et al., Timing of Insemination for Dairy Cows Identified in Estrus by a Radiotelemetric Estrus Detection System. 1998 J Dairy Sci. 81: 1874 - 1882	<input type="checkbox"/>
13	Maatje, K. et al. Predicting Optimal Time of Insemination in Cows that Show Visual Signs of Estrus by Estimating onset of Estrus with Pedometers	<input type="checkbox"/>
14	Nebel, R.L. et al. Timing of Artificial Insemination of Dairy Cows: Fixed Time Once Daily Versus Morning and Afternoon 1994 J Dairy Sci. 77:3185 - 3191	<input type="checkbox"/>
15	Pursley, J. Richard, et al. Effect of Time of Artificial Insemination on Pregnancy Rates, Calving Rates, Pregnancy Loss, and Gender Ratio After Synchronization of Ovulation in Lactating Dairy Cows. 1998 J Dairy Sci. 81: 2139- 2144	<input type="checkbox"/>
16	Rozeboom, K. J. et al. Late Estrus or Mestruus Insemination After Estrus Inseminations Decreases Farrowing Rate and Litter Size in Swine J. Animal Sci. 1997. 75: 2323 - 2327	<input type="checkbox"/>

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17	Peeler, I. D. et al. Pregnancy Rates After Times AI of Heifers Following Removal of Intravaginal Progesterone Inserts, J. Dair Sci., 87:2868-2873; 2004	<input type="checkbox"/>
18	Rath, D. Low Dose Insemination in the Sow - A Review, Reprod. Dom Anim. 37, 201-205 (2002) www.blackwell.de/synergy.	<input type="checkbox"/>
19	Lukaszewicz, M. et al. Attempts on freezing the Greylag (Anser anser L.) gander semen. Animal Reproduction Science 80 (2004) 163-173	<input type="checkbox"/>
20	Foote, R. H. et al. Sperm Numbers Inseminated in Dairy Cattle and Nonreturn Rates Revisited. 1997 J Dairy Science 80:3072-3076	<input type="checkbox"/>
21	Conley, H.H. et al. Intensification by Intrauterine Devices of Sperm Loss from the Sheep Uterus. Biology of Reproduction 2, 401-407 (1970)	<input type="checkbox"/>
22	Chrenek, Peter et al. Fertilizing Capacity of Transgenic and Non-Transgenic Rabbit Spermatozoa after Heterospermic Insemination. Bull Vet. Inst. Pulawy 49, 307-310, 2005	<input type="checkbox"/>
23	Bakst, Murray R. Fate of Fluorescent Stained Sperm following Insemination: New Light on Oviclucal Sperm Transport and Storage in the Turkey	<input type="checkbox"/>
24	Johnson L.A., et al. use of boar spermatozoa for artificial insemination, II. Fertilization Capacity of fresh and frozen spermatozoa in gilts inseminated either at a fixed time or according to walsmeta readings, Journal of Animal Science, vol. 54 No. 1, 1982 pp 126-131	<input type="checkbox"/>
25	Pursel, V. G., et al. Distribution and morphology of fresh and frozen-thawed sperm in the reproductive tract of gilts after artificial insemination; Biology of Reproduction 19, 69-76 (1978)	<input type="checkbox"/>
26	Koh-ichi Hamano, et al., Gender Preselection in Cattle with Intracytoplasmically injected, flow cytometrically sorted sperm heads, Biology of Reproduction 60, 1194-1197 (1990)	<input type="checkbox"/>
27	Hollinshead, F.K. et al., Birth of lambs of pre-determined sex after in vitro production of embryos using frozen-thawed sex-sorted and re-frozen-thawed ram spermatozoa, Reproduction (Cambridge, England) May 2004, Vol. 127, o. 5, pages 557-568	<input type="checkbox"/>

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28	Nikkei Biotech, Supplement, Latest Information of Biological Instruments and Reagents, 1988, pp. 93-94	<input type="checkbox"/>
29	Ereth, B.A., et al. Integration of Early Weaning and Sexed Semen into a Single-Calf Heifer System to Increase Value of Non-Replacement Heifers; Proceedings, Western Section, American Society of Animal Science, Vol. 51,441-443, June 2000	<input type="checkbox"/>
30	Ereth, B.A., et al. Integration of Early Weaning and Sexed Semen into a Single-Calf Heifer System to Increase Value of Non-Replacement Heifers; Abstract Only, Journal of Animal Science, Vol. 78, Supplement 2, 2000	<input type="checkbox"/>
31	Bavister, B.D. et al., The effects of Sperm Extracts and Energy Sources on the Motility and Acromosome Reaction of hamster Spermatozoa in vitro; Biology of Reproduction 16, 228-237 (1997)	<input type="checkbox"/>
32	Fattouh, El-S.M. et al., Effect of Caffeine on the Post-Thaw Motility of Buffalo Spermatozoa; Theriogenology, July 1991, vol. 36 No. 1	<input type="checkbox"/>
33	Rath, D., "On the Status of Sex-Specific Sperm Sorting" Review lecture ET Conference 2002, Department of Animal Production and Animal Behaviour, Mariensee, Germany	<input type="checkbox"/>
34	Grossfeld, R., "Experiments to Improve the Quality of Sex-Sorted Fresh and Frozen Porcine Spermatozoa" PhD thesis of the Faculty of Agricultural Sciences, Georg-August University, Gottingen, May 2007	<input type="checkbox"/>
35	Parallel Chinese Application Number CN 038174784.7; Office Action dated 03/16/2007	<input type="checkbox"/>
36	United States Application Number 11/092,509, response to Restriction filed 06/21/2006	<input type="checkbox"/>
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39	United States Application Number 11/092,313, Response to OA filed 02/06/2007	<input type="checkbox"/>
40	United States Application Number 10/433,183, Office Action mailed 1/22/2007	<input type="checkbox"/>
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